



SEQUENCE LISTING

<110> Liggett, Stephen

<120> Alpha-2B-adrenergic receptor polymorphisms

<130> Sequences 1-23

<140> 09/692,077

<141> 2000-10-19

<160> 23

<170> PatentIn Ver. 2.0

<210> 1

<211> 1353

<212> DNA

<213> Homo sapiens

<400> 1

atggaccacc aggaccacct ctccgtgcag gccacagcgg ccatagcggc ggccatcacc 60  
ttcctcattc tctttaccat ctccggcaac gctctggtca tcttggctgt gttgaccagc 120  
cgctcgctgc gcgccccca gaacctgttc ctgggtgtgc tggccggcgc cgacatcctg 180  
gtggccacgc tcatcatccc tttctcgtg gccaacgagc tgctgggcta ctggtacttc 240  
cggcgcacgt ggtgcgaggt gtacctggcg ctcgacgtgc tcttctgcac ctcgccatc 300  
gtgcacctgt gcgccatcag cctggaccgc tactgggccc tgagccgcgc gctggagtac 360  
aactccaagc gcaccccgcg ccgcacaaag tgcacatccc tactgtgtg gctcatcgcc 420  
gccgtcatct cgctgcgcgc cctcatctac aaggggcacc agggcccca gccgcgcggg 480  
cgccccagc gcaagctcaa ccaggaggcc tggtagatcc tggcctccag catcggaatc 540  
ttctttgtgc cttgcctcat catgatcctt gtctacctgc gcacatcact gatcgccaaa 600  
cgcagcaacc gcagaggtcc caggggcacc ggggggctg gccaggggtg gtccaagcag 660  
ccccgaccgc accatggtgg ggctttggcc tcagccaaac tgccagccct ggctctgtg 720  
gcttctgcca gagaggtcaa cggacactcg aagtcactg gggagaagga ggagggggag 780  
accctgaag atactgggac ccgggccttg ccaccagct gggctgccct tcccaactca 840  
ggccagggcc agaaggaggg tgtttgtggg gcacatccag aggatgaagc tgaagaggag 900  
gaagaggagg aggaggagga ggaagagtgt gaacccacag cagtgccagt gtctccggcc 960  
tcagcttgca gcccccgct gcagcagcca cagggtctcc ggggtgctggc caccctacgt 1020  
ggccaggtgc tcttgggagc gggcggtggg gctataggtg ggcagtgggt gcgtcgaagg 1080  
gcgcagctga ccgggagaa gcgcttcacc ttctgtctgg ctgtggatcat tggcgttttt 1140  
gtgctctgct ggttccccct cttcttcagc tacagcctgg gcgccatctg cccgaagcac 1200  
tgcaaggtgc cccatggcct cttccagttc ttcttctgga tgggtactg caacagctca 1260  
ctgaaccctg ttatctacac catcttcaac caggacttcc gccgtgcctt ccggaggatc 1320  
ctgtgcccgc cgtggaccca gacggcctgg tga 1353

<210> 2

<211> 1344

<212> DNA

<213> Homo sapiens

<400> 2

atggaccacc aggaccacct ctccgtgcag gccacagcgg ccatagcggc ggccatcacc 60  
ttcctcattc tctttaccat ctccggcaac gctctggtca tcttggctgt gttgaccagc 120  
cgctcgctgc gcgccccca gaacctgttc ctgggtgtgc tggccggcgc cgacatcctg 180  
gtggccacgc tcatcatccc tttctcgtg gccaacgagc tgctgggcta ctggtacttc 240  
cggcgcacgt ggtgcgaggt gtacctggcg ctcgacgtgc tcttctgcac ctcgccatc 300  
gtgcacctgt gcgccatcag cctggaccgc tactgggccc tgagccgcgc gctggagtac 360

aactccaagc gcaccccgcg ccgcatcaag tgcacatcc tcaactgtgtg gctcategcc 420  
gccgtcatct cgctgccgcc cctcatctac aagggcgacc agggcccccga gccgcgcggg 480  
cgccccagct gcaagctcaa ccaggaggcc tggtagatcc tggcctccag catcggatct 540  
ttctttgtct cttgcctcat catgatcctt gtctacctgc gcatctacct gatcgccaaa 600  
cgcagcaacc gcagaggtcc cagggccaag ggggggcctg ggcaggggtga gtccaagcag 660  
ccccgacccg accatgggtg ggctttggcc tcagccaaac tgccagccct ggectctgtg 720  
gcttctgccg gagaggtcaa cggacactcg aagtccactg gggagaagga ggagggggag 780  
accctgaag atactgggac ccggggcctg ccaccagtt gggctgccct tcccaactca 840  
ggccagggcc agaaggaggg tgtttgtggg gcatctccag aggatgaagc tgaagaggag 900  
gaggaggagg aggaagagt tgaacccag gcagtgccag tgtctccggc ctcagcttgc 960  
agccccccgc tgcagcagcc acagggctcc cgggtgctgg ccaccctacg tggccagggtg 1020  
ctcctgggca ggggcgtggg tgctataggt gggcagtggg ggcgtcgaag ggcgcagctg 1080  
accggggaga agcgcttcac cttcgtgctg gctgtgggtca ttggcgtttt tgtgctctgc 1140  
tggttccctt tcttcttcag ctacagcctg ggcgccatct gccgaagca ctgcaagggtg 1200  
ccccatggcc tcttccagtt cttcttctgg atcggtact gcaacagctc actgaaccct 1260  
gttatctaca ccattctcaa ccaggacttc cgccgtgcct tccggaggat cctgtgccgc 1320  
ccgtggaccc agacggcctg gtga 1344

<210> 3  
<211> 9  
<212> DNA  
<213> Homo sapiens

<400> 3  
gaagaggag 9

<210> 4  
<211> 9  
<212> DNA  
<213> Homo sapiens

<400> 4  
gaggaggag 9

<210> 5  
<211> 9  
<212> DNA  
<213> Homo sapiens

<400> 5  
cttctcctc 9

<210> 6  
<211> 9  
<212> DNA  
<213> Homo sapiens

<400> 6  
ctcctcctc 9

<210> 7  
<211> 450  
<212> PRT  
<213> Homo sapiens

<400> 7  
Met Asp His Gln Asp Pro Tyr Ser Val Gln Ala Thr Ala Ala Ile Ala

1  
A1  
contd

1 5 10 15

Ala Ala Ile Thr Phe Leu Ile Leu Phe Thr Ile Phe Gly Asn Ala Leu  
20 25 30

Val Ile Leu Ala Val Leu Thr Ser Arg Ser Leu Arg Ala Pro Gln Asn  
35 40 45

Leu Phe Leu Val Ser Leu Ala Ala Ala Asp Ile Leu Val Ala Thr Leu  
50 55 60

Ile Ile Pro Phe Ser Leu Ala Asn Glu Leu Leu Gly Tyr Trp Tyr Phe  
65 70 75 80

Arg Arg Thr Trp Cys Glu Val Tyr Leu Ala Leu Asp Val Leu Phe Cys  
85 90 95

Thr Ser Ser Ile Val His Leu Cys Ala Ile Ser Leu Asp Arg Tyr Trp  
100 105 110

Ala Val Ser Arg Ala Leu Glu Tyr Asn Ser Lys Arg Thr Pro Arg Arg  
115 120 125

Ile Lys Cys Ile Ile Leu Thr Val Trp Leu Ile Ala Ala Val Ile Ser  
130 135 140

Leu Pro Pro Leu Ile Tyr Lys Gly Asp Gln Gly Pro Gln Pro Arg Gly  
145 150 155 160

Arg Pro Gln Cys Lys Leu Asn Gln Glu Ala Trp Tyr Ile Leu Ala Ser  
165 170 175

Ser Ile Gly Ser Phe Phe Ala Pro Cys Leu Ile Met Ile Leu Val Tyr  
180 185 190

Leu Arg Ile Tyr Leu Ile Ala Lys Arg Ser Asn Arg Arg Gly Pro Arg  
195 200 205

Ala Lys Gly Gly Pro Gly Gln Gly Glu Ser Lys Gln Pro Arg Pro Asp  
210 215 220

His Gly Gly Ala Leu Ala Ser Ala Lys Leu Pro Ala Leu Ala Ser Val  
225 230 235 240

Ala Ser Ala Arg Glu Val Asn Gly His Ser Lys Ser Thr Gly Glu Lys  
245 250 255

Glu Glu Gly Glu Thr Pro Glu Asp Thr Gly Thr Arg Ala Leu Pro Pro  
260 265 270

Ser Trp Ala Ala Leu Pro Asn Ser Gly Gln Gly Gln Lys Glu Gly Val  
275 280 285

Cys Gly Ala Ser Pro Glu Asp Glu Ala Glu Glu Glu Glu Glu Glu  
290 295 300

Glu Glu Glu Glu Glu Cys Glu Pro Gln Ala Val Pro Val Ser Pro Ala

*Ala  
contd*

305 310 315 320  
Ser Ala Cys Ser Pro Pro Leu Gln Gln Pro Gln Gly Ser Arg Val Leu  
325 330 335  
Ala Thr Leu Arg Gly Gln Val Leu Leu Gly Arg Gly Val Gly Ala Ile  
340 345 350  
Gly Gly Gln Trp Trp Arg Arg Arg Ala Gln Leu Thr Arg Glu Lys Arg  
355 360 365  
Phe Thr Phe Val Leu Ala Val Val Ile Gly Val Phe Val Leu Cys Trp  
370 375 380  
Phe Pro Phe Phe Phe Ser Tyr Ser Leu Gly Ala Ile Cys Pro Lys His  
385 390 395 400  
Cys Lys Val Pro His Gly Leu Phe Gln Phe Phe Phe Trp Ile Gly Tyr  
405 410 415  
Cys Asn Ser Ser Leu Asn Pro Val Ile Tyr Thr Ile Phe Asn Gln Asp  
420 425 430  
Phe Arg Arg Ala Phe Arg Arg Ile Leu Cys Arg Pro Trp Thr Gln Thr  
435 440 445  
Ala Trp  
450

<210> 8  
<211> 447  
<212> PRT  
<213> Homo sapiens

<400> 8  
Met Asp His Gln Asp Pro Tyr Ser Val Gln Ala Thr Ala Ala Ile Ala  
1 5 10 15  
Ala Ala Ile Thr Phe Leu Ile Leu Phe Thr Ile Phe Gly Asn Ala Leu  
20 25 30  
Val Ile Leu Ala Val Leu Thr Ser Arg Ser Leu Arg Ala Pro Gln Asn  
35 40 45  
Leu Phe Leu Val Ser Leu Ala Ala Ala Asp Ile Leu Val Ala Thr Leu  
50 55 60  
Ile Ile Pro Phe Ser Leu Ala Asn Glu Leu Leu Gly Tyr Trp Tyr Phe  
65 70 75 80  
Arg Arg Thr Trp Cys Glu Val Tyr Leu Ala Leu Asp Val Leu Phe Cys  
85 90 95  
Thr Ser Ser Ile Val His Leu Cys Ala Ile Ser Leu Asp Arg Tyr Trp  
100 105 110

Ala Val Ser Arg Ala Leu Glu Tyr Asn Ser Lys Arg Thr Pro Arg Arg  
115 120 125

Ile Lys Cys Ile Ile Leu Thr Val Trp Leu Ile Ala Ala Val Ile Ser  
130 135 140

Leu Pro Pro Leu Ile Tyr Lys Gly Asp Gln Gly Pro Gln Pro Arg Gly  
145 150 155 160

Arg Pro Gln Cys Lys Leu Asn Gln Glu Ala Trp Tyr Ile Leu Ala Ser  
165 170 175

Ser Ile Gly Ser Phe Phe Ala Pro Cys Leu Ile Met Ile Leu Val Tyr  
180 185 190

Leu Arg Ile Tyr Leu Ile Ala Lys Arg Ser Asn Arg Arg Gly Pro Arg  
195 200 205

Ala Lys Gly Gly Pro Gly Gln Gly Glu Ser Lys Gln Pro Arg Pro Asp  
210 215 220

His Gly Gly Ala Leu Ala Ser Ala Lys Leu Pro Ala Leu Ala Ser Val  
225 230 235 240

Ala Ser Ala Arg Glu Val Asn Gly His Ser Lys Ser Thr Gly Glu Lys  
245 250 255

Glu Glu Gly Glu Thr Pro Glu Asp Thr Gly Thr Arg Ala Leu Pro Pro  
260 265 270

Ser Trp Ala Ala Leu Pro Asn Ser Gly Gln Gly Gln Lys Glu Gly Val  
275 280 285

Cys Gly Ala Ser Pro Glu Asp Glu Ala Glu Glu Glu Glu Glu Glu  
290 295 300

Glu Glu Cys Glu Pro Gln Ala Val Pro Val Ser Pro Ala Ser Ala Cys  
305 310 315 320

Ser Pro Pro Leu Gln Gln Pro Gln Gly Ser Arg Val Leu Ala Thr Leu  
325 330 335

Arg Gly Gln Val Leu Leu Gly Arg Gly Val Gly Ala Ile Gly Gly Gln  
340 345 350

Trp Trp Arg Arg Arg Ala Gln Leu Thr Arg Glu Lys Arg Phe Thr Phe  
355 360 365

Val Leu Ala Val Val Ile Gly Val Phe Val Leu Cys Trp Phe Pro Phe  
370 375 380

Phe Phe Ser Tyr Ser Leu Gly Ala Ile Cys Pro Lys His Cys Lys Val  
385 390 395 400

Pro His Gly Leu Phe Gln Phe Phe Phe Trp Ile Gly Tyr Cys Asn Ser  
405 410 415

*Q1  
contd*

Ser Leu Asn Pro Val Ile Tyr Thr Ile Phe Asn Gln Asp Phe Arg Arg  
420 425 430

Ala Phe Arg Arg Ile Leu Cys Arg Pro Trp Thr Gln Thr Ala Trp  
435 440 445

<210> 9  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 9  
Glu Asp Glu Ala Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu  
1 5 10 15

<210> 10  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 10  
Glu Asp Glu Ala Glu Glu Glu Glu Glu Glu Glu Glu  
1 5 10

<210> 11  
<211> 3  
<212> PRT  
<213> Homo sapiens

<400> 11  
Glu Glu Glu  
1

<210> 12  
<211> 3  
<212> PRT  
<213> Homo sapiens

<400> 12  
Cys Glu Pro  
1

<210> 13  
<211> 21  
<212> DNA  
<213> Homo sapiens

<400> 13  
gctcatcatc cctttctcgc t

21

<210> 14  
<211> 21

*Ala 1. contd*

<212> DNA  
<213> Homo sapiens

<400> 14  
aaagccccac catgggtcggg t 21

<210> 15  
<211> 20  
<212> DNA  
<213> Homo sapiens

<400> 15  
ctgatcgcca aacgagcaac 20

<210> 16  
<211> 20  
<212> DNA  
<213> Homo sapiens

<400> 16  
aaaaacgcca atgaccacag 20

<210> 17  
<211> 18  
<212> DNA  
<213> Homo sapiens

<400> 17  
tgtaaaacga cggccagt 18

<210> 18  
<211> 18  
<212> DNA  
<213> Homo sapiens

<400> 18  
caggaaacag ctatgacc 18

<210> 19  
<211> 21  
<212> DNA  
<213> Homo sapiens

<400> 19  
agaaggaggg tgtttgtggg g 21

<210> 20  
<211> 21  
<212> DNA  
<213> Homo sapiens

<400> 20  
acctatagca cccacgcccc t 21

<210> 21  
<211> 21  
<212> DNA

*Handwritten signature/initials*

<213> Homo sapiens

<400> 21

ggccgacgct cttgtctagc c

21

<210> 22

<211> 20

<212> DNA

<213> Homo sapiens

<400> 22

caaggggttc ctaagatgag

20

<210> 23

<211> 9

<212> PRT

<213> Homo sapiens

<400> 23

Tyr Pro Tyr Asp Val Pro Asp Tyr Ala

1

5

09/692,077